

Hot water plant, Aproz Sources Minérales SA,

Complex controls in Aproz are no longer necessary.

The mineral spring Aproz Sources Minérales SA operates a hot water plant consisting of 3 boilers at the Aproz site. As a mineral water producer, like many food companies, they depend on a reliable heat source. Hot water and steam are required for all processes from sterilisation to pasteurisation. Therefore, a failure of these systems would have far-reaching consequences for the production, which in extreme cases would even be interrupted.

The old safety control of boiler 3 was implemented in BOSB 72 (operation without permanent supervision), which required extensive checks at least every 72 hours.

Forwarding implementation thanks to good planning and prefabrication.

As this boiler was mainly operated, the conversion had to be planned in detail. Thanks to the prefabricated mounting plate, the conversion and commissioning was completed in four days.

The non-safety-relevant part of the control system was left in place and only all components of the old BOSB 72 control system were removed and replaced by a prefabricated mounting plate. The new control system was thus implemented in the BOME (operation without manual intervention), which significantly reduced the amount of work required for monitoring.



Figure 1: New BOME mounting plate

The work in the periphery included the replacement of all safety-relevant field devices. This also involved adapting the manostat bar and the piping to the differential pressure gauge. The mechanical adaptations were carried out by a third party company, which was called in, instructed and coordinated by us.

Due to the newly installed HMI, the current status of the plant is visible at a glance. In addition, the control behaviour of the burner, as well as that of the field devices, can be adjusted, controlled and monitored. The greatest possible flexibility was ensured here without restricting safety and functionality. The HMI has been programmed in two languages (DE / FR), so that the operator can easily set his preferred language at any time.

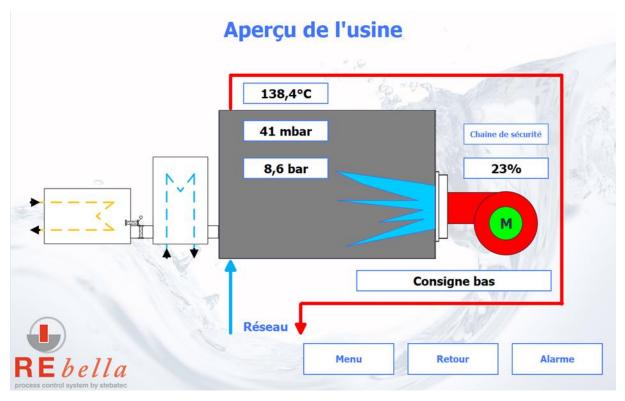


Figure 2: HMI overview screen

The successful safety acceptance in cooperation with the SVTI (Swiss Association for Technical Inspections) and the Swiss Safety Center rounded off the successful completion of the project and also contributed to the customer's complete satisfaction.